

I. AMENDMENTS TO THE CLAIMS:

Please cancel claims 23, 25, 27-31, 33-39 and 41-43 without prejudice.

The following listing of claims will replace all prior versions of claims in the present application. No new matter has been added to the claims.

Listing of Claims:

Claims 1 to 45 have been cancelled.

46. (Previously Presented) A watch including:

(a) a case containing a watch movement on which a dial is mounted, the watch movement including electronic circuits able to generate time signals to be sent to motor means controlling at least first and second analogue display members, wherein the analogue display members are arranged above the dial to display current time in a time mode that is a first operating mode;

(b) a sensor for a physical magnitude, for periodic acquisition of value of the physical magnitude as a function of time in a second operating mode, wherein said sensor is an ambient pressure sensor; and

(c) means for automatically activating said second operating mode from said time mode in response to immersion of the watch in water, wherein the sensor is connected to means for processing values capable of generating electric signals to storage means provided for storing values, wherein the watch has a historic mode that is a third operating mode in which the processing means are arranged for generating control signals to be sent to the motor means for a display representative of stored values of the physical magnitude as a function of time so that at least said first analogue display member indicates, opposite suitable graduations of the watch, the value of a variable, the change in which is linked to

physical magnitude value on condition that the variable does not give any indication relating to time remaining before a decompression stop has to be made or any indication relating to a minimum depth not to be exceeded by a person wearing the watch when coming up from a dive when said second analogue display member is made to indicate information relating to a depth and said first analogue display member indicates a measured depth.

47. (Previously Presented) A watch including:

(a) a case containing a watch movement on which a dial is mounted, the watch movement including electronic circuits able to generate time signals to be sent to motor means controlling at least first and second analogue display members, wherein the analogue display members are arranged above the dial to display current time in a time mode that is a first operating mode;

(b) a sensor for a physical magnitude, for periodic acquisition of value of the physical magnitude as a function of time in a second operating mode, wherein the sensor is connected to means for processing values capable of generating electric signals to storage means provided for storing values, wherein the watch has a historic mode that is a third operating mode in which the processing means are arranged for generating control signals to be sent to the motor means for a display representative of stored values of the physical magnitude as a function of time so that at least said first analogue display member indicates, opposite suitable graduations of the watch, the value of a variable, the change in which is linked to physical magnitude value on condition that the variable does not give any indication relating to time remaining before a decompression stop has to be made or any indication relating to a minimum depth not to be exceeded by a person wearing the watch when coming up from a dive when said second analogue display member is made to indicate information relating to a depth, and

wherein in said historic mode, said electronic circuits are capable of operating said motor means so that the display of the value of said variable as a function of time is performed over a predefined maximum period of time, so that when actual duration of said acquisition of the value of the physical magnitude is greater than said predefined period of time, the value of said variable as a function of time is displayed in an accelerated manner.